

decisions, one misclassification, and four inconclusives.

Raskin and Hare (1978)

Raskin and Hare (1978) set out to answer the question, how effective is the "control question" (now known as comparison question) test in detecting deception in psychopaths when standard measures of respiration, electrodermal, and cardiovascular activity are used. They published the results of their study in an article *Psychopathy and Detection of Deception in a Prison Population* (1978). Forty-eight subjects, half of whom were diagnosed as psychopathic, were obtained from the inmate population in Burnaby, British Columbia. The subjects were instructed to enter an otherwise off-limits room when no one would see them and steal \$20.00 from an envelope and secrete it on their person. They were subsequently escorted to another room where they were subjected to polygraphic examination. If a guilty subject could produce a false negative (i.e., a guilty person adjudged as innocent) and the criterion-innocent subjects a true negative (i.e., an innocent person adjudged as innocent) they would each receive a \$20.00 reward. A \$20.00 reward, at that time, represented the equivalent of about 27 days pay for prison labor. Raskin crafted the questions, administered the test, evaluated the data, and ultimately rendered a diagnostic opinion. Raskin's evaluation of the data was done while blind to the programming status of subjects. Between-chart comments were used (e.g., "Do any of the questions bother you?" and "Would you like to change the wording of any question?") and directed all subjects' attention toward the comparison question, a practice that has remained highly controversial, and not widely adopted. If a subject expressed sensitivity to a comparison question the question of focus was changed; however, no relevant question was changed irrespective of whether a subject voiced concern to a relevant question.

When using the full complement of charts (anywhere between three and seven) 88% of decisions were correctly categorized, 4% were incorrect, and 8% were inconclusive. An overall accuracy of 96% was reported, excluding inconclusive opinions. Raskin and

Hare concluded that there was no significant difference in accuracy rates for psychopaths and non-psychopaths. In other words, psychopaths were as easily detected as non-psychopaths. It was also noted that the psychopaths showed stronger electrodermal responses and heart rate decelerations.

Criticisms

In his paper, *The Psychopath and the Lie Detector* David T. Lykken (1978) analyzed Raskin and Hare's 1978 study. Lykken states, "It is my opinion that all of these important implications, claims, and conclusions are unsupported by the evidence at hand, and may have adverse and serious social consequences." Lykken maintained that the experiment did not definitively demonstrate that deception employed by psychopaths was any more or less easily detected than in non-psychopaths with the polygraph. Lykken argued that psychopaths and non-psychopaths alike should have little difficulty in thwarting the lie detector because all they need to do is augment their responses to selected questions. Virtually anyone can be taught to recognize comparison questions, argues Lykken. Lykken maintains the reason why psychopaths are believed to be able to defeat a polygraph test is because some hold that "psychopaths are habitual or practiced liars and seem to feel relatively little guilt or fear about these actions (referring to the mock crime paradigm) or their consequences." Lykken holds that innocent or guilty, a normal subject will experience apprehension about the relevant question and will thus fail the comparison question test. According to Lykken, "Because he is less disposed toward anxious apprehension, the psychopath might be expected to respond relatively less to the critical questions whether he is innocent or guilty of the real criminal act of which he is suspected." Moreover, the psychopath's responses to comparison questions would also "... be relatively more attenuated so that the most plausible expectation might be that the psychopath would produce relatively more "inconclusive" outcomes and fewer "deceptive verdicts than would a normal subject." While responses, in general, may arguably be more attenuated it is doubtful that such attenuation would be selective to one type question to the exclusion of another. "The only reason for

expecting the psychopath to be better able to avoid failing the lie test, even though deceptive, is that he might be expected to be less frightened or guilty. . . than will be the normal subject," says Lykken. With this in mind, Lykken maintains that Raskin and Hare's mock crime experiment ". . . would not have anything to do with genuine fear or guilt." Of Raskin and Hare's experiment Lykken said, ". . . I cannot imagine that I would have found the experience frightening or guilt-provoking in any way. On the contrary, I should think it would have seemed like an interesting game in which I stood a chance of winning a \$20.00 prize plus the admiration of my colleagues. . . ." What Lykken is touching upon, with respect to gaining ". . . the admiration of my colleagues," is the reference to "duping delight" (Ekman, 1992). In addressing duping delight, Paul Ekman writes, "The liar may feel excitement, either when anticipating the challenge or during the very moment of lying, when success is not yet certain. Afterward there may be the pleasure that comes with relief, pride in achievement, of feelings of smug contempt toward the target." Lykken goes on to say, "What is different about the psychopath is his attenuated capacity for fearful or guilty apprehension; no psychopath of my acquaintance is deficient in his interest in games, in opportunities to 'show off,' or in winning money prizes."

In addressing responses to relevant questions posed in Raskin and Hare's experiment, they should not have produced ". . . the kind of fear or apprehension that the lie test elicits in real life." This is the external validity argument (i.e. generalizability of laboratory test results to a real-world situation) that polygraph laboratory studies often suffer. Thus, according to Lykken, responses to the relevant question should have been interpreted merely as orienting responses that the psychopath displays as frequently as non-psychopaths.

The stronger electrodermal responses noted in this study are of particular interest, because previous work by Lykken (1955) showed that psychopaths were electrodermally hyporeactive (i.e., less reactive). This lack of electrodermal responsiveness, coupled with the associated features of persons diagnosed with APD, gave rise, within the scientific

community, to the hypothesis that psychopaths should be able to defeat the polygraph examination process. The Raskin and Hare study arguably demonstrated otherwise.

Hammond (1980)

Hammond's (1980) dissertation involved polygraph laboratory research into the responding of normals, alcoholics, and psychopaths. The purpose of Hammond's research was to test the hypothesis of atypical responding by alcoholics and psychopaths as compared with normals who undergo a polygraph experiment. Psychopaths were examined because of purported deficits in the area of conscience development that could theoretically make them more difficult to detect when lying. Hammond was also interested in substantiating claims made by previous investigators who had studied psychopaths and found them to be "...adequate responders and therefore amenable to the polygraph test."

Sixty-two subjects participated in Hammond's study and were placed in one of three groups (i.e., normals (21), alcoholics (20), and psychopaths (21)). The mock crime paradigm involved the theft of \$10.00 from a pair of coveralls hanging in a closet of a room. Thirty-two subjects were guilty of stealing the money and 30 subjects were innocent. All subjects were promised \$7.00 for participation and were told of the possibility of earning a \$10.00 bonus for producing a false negative result. A probable-lie comparison question test was administered using the Zone Comparison Test format. Subjects met the following profile: white males, ages 21 through 55, prison record, moderate to low income, and living in the greater San Diego, CA area. Polygraph examiners were in week five and six of a seven-week training program. Hammond's study capitalized on shortcomings he believed plagued other studies (e. g. inadequate control groups; use of incarcerated subjects; questionable participant motivation; participant personality group disclosure).

No significant differences were found regarding the suitability of the three categories of subjects who underwent a control-question polygraph examination. All were detected

above chance level. Hammond reported an accuracy rate of 93% when inconclusives ($n=35$) were eliminated from the computation, with 7% error. The inconclusive range was set at ± 8 , which may have created a larger proportion of inconclusive decisions that would the more orthodox cutting scores of ± 6 . Hammond concluded, "The data provides no support to the myth that psychopaths can lie without producing some psychological, emotional, or physiological concomitants that are associated with deception."

Patrick and Iacono (1989)

With the challenges and controversy that Lykken surfaced surrounding the Raskin and Hare study it was inevitable that additional research into the efficacy of detecting deception in the psychopath, though use of a polygraph, would need to be undertaken. Eleven years later it was.

Patrick and Iacono (1989) responded to the challenge and embarked on a study, with "procedural refinements" to reevaluate the accuracy of the comparison question test with psychopathic individuals. The study utilized a mock crime scenario involving 48 inmates from the same British Columbia prison as in the Raskin and Hare study. Half of the subjects were classified as psychopathic. Psychopathy was determined by using the Psychopathy Checklist developed by Hare. The Checklist is an "... instrument whose psychometric properties and relevance to Cleckley's conception of psychopathy are well-established." Other measures of evaluation were also employed; lengthy structured interview; and case record review by two trained diagnosticians, and only where consensus existed as to inmate classification were inmates selected for study. A total of 107 inmates were screened before the final sample of 48 was secured.

The scenario involved the theft of \$20 from a doctor's jacket coat pocket that was in a room normally off-limits to prisoners. One of the keys of this study is that the scenario was set up to capitalize principally on conditions of threat (i.e., failure and the consequences) versus reward. There was an initial monetary incentive for inmates to undergo initial screening (i.e., \$2.00) and an additional

\$10.00 bonus if they were ultimately selected as a participant. All subjects were instructed that the study was designed to see if they had the ability to beat the polygraph test when there was something important at stake. It is important to understand that no "individual incentive" was offered per se. However, each individual group member (48 in all) stood to gain an additional \$20.00 bonus if no more than 10 of the 48 inmates were classified as deceptive. The experimenter stressed to each subject how important their individual performance was to the group and that his peers were counting on them. If more than 10 inmates were classified as deceptive, the inmate participants were told they would lose the bonus and the name of the participants responsible would be made known to the prison population--who presumably would deal with those responsible in the customary prison manner. Although unknown to the study participants at the time, each subject would ultimately receive the \$20.00 bonus irrespective of their test results.

Results and Conclusions of the Patrick and Iacono Study

Excluding the inconclusive rate, the overall hit rate for both groups was 87%. Only 2 of 12 guilty psychopaths and only 1 of 12 innocent non-psychopaths were misclassified (false negative v. false positive rate). With respect to the innocent subjects, group differences in accuracy were reported as non-significant (the actual data were not provided). Excluding the inconclusive rate the overall hit rate for innocent subjects was only 56%.

To test for the unknown influence of extra-polygraphic cues or contamination in the overall accuracy decision, Patrick and Iacono (1989) had the examiner, just prior to going into data collection, register an opinion on a weighted scale as to the examinee's guilt or innocence. The study found that pretest guilt judgments did not exceed chance.

The results of this study supported Raskin and Hare's (1978) study where psychopaths were no more likely to defeat a comparison question polygraph test than were non-psychopaths. This is still the case with blind numerical evaluations by an independent evaluator. Moreover, the inter-

rater agreement between the examiner of record and the independent evaluator was 87% permitting only a limited biasing influence from extra-polygraphic information. Some may challenge the studies we have presented in this article from the standpoint that they may not accurately reflect how psychopaths truly perform in real-life polygraph examinations (Hare, Forth, & Hart, 1989), however, this is the same argument that could be made for virtually any laboratory study involving the detection of deception.

Conclusion

You were introduced to a psychopath--Charles Starkweather. The evolutionary and continuing dilemma of proper classification was addressed. Yet one cannot help being left with the impression that as more is learned about the psychopath other terms shall find their way on the ever-expanding list of terms. The origin and definition of psychopathy, as it is known today, was explored. However, a new more precise definition is surely to come. The psychopath is better understood today, because of the work of Dr. Hare and others who have given us an insight into the personality traits and behavioral characteristics of psychopaths. As predatory as psychopaths are there are some who incredibly advocate that they be emulated. Thankfully, those who know psychopathy best find this suggestion perverse. Whether psychopathy has a biological, behavioral, or other component we know that we must contend with the millions of Americans who fit the definition of psychopath yet may never cross the line into criminality. Society cannot afford to remain indifferent to the psychopath's manipulative and predatory ways for in its grossest form they can wreak devastation on our way of life. Finally, the limited but rather convincing research on the efficacy of detecting deception in psychopaths, whose deception is purportedly impervious to detection, was reviewed.

In the absence of other evidence, one may conclude that the collective and consistent findings in the Raskin, Barland, and Podlesny (1977), Raskin and Hare (1978), Hammond (1980), and Patrick and Iacono (1989) studies debunk the myth that the psychopath's deception is impervious to

discovery through the use of a polygraph. Moreover, when the psychopath engages in deception, his or her deception is no more difficult to detect than deception practiced by non-psychopaths. The question is why.

Earlier it was mentioned that the psychopath's Achilles heel may stem, in part, from the fact that they, like the rest of us, don't want to have their prevarications found out--particularly when the consequence of disclosure might impact them legally. We learned that psychopaths care about things that affect them immediately. They are motivated to pass their polygraph test, if for no other reason than to simply dupe the examiner. They are challenged not only by the opposition, who they view as merely a roadblock, but by an inanimate object with which they likely have had little or no exposure and likely have never defeated in battle. The psychopath finds himself in a unique setting that is highly controlled--by others.

The fact that the psychopath's deception, in the studies that were reviewed, was no more difficult to ferret out than the non-psychopath suggests the possibility that they might, in fact, become as emotionally aroused by relevant questions as non-psychopathic people do when engaged in deception. It is well established that guilt, one of the emotion-based theories, is not a necessary precondition for polygraph detection efficacy. It is also known that cognitive-based theories, such as cognitive awareness, offer a plausible explanation for why polygraph subjects respond to critical items in Concealed Information Tests, Peak-of-Tension, and other tests. Finally, in explaining the rationale behind the research results involving detection of deception efficacy of psychopaths Hare, Forth, and Hart (1989), write "... it is more a reflection of perceptual-cognitive demands than of fear or anxiety. That is, a psychopath who is not at all anxious or fearful during the examination may nevertheless respond physiologically to the critical questions because he sees the examination as a game or challenge and because he is highly motivated to beat the test."

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